

Taxonomic changes relating to New Zealand stick insects

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Abstract

Following research on New Zealand stick-insect type specimens four new synonyms have been identified, as follows: *Pachymorpha finitima* Brunner von Wattenwyl, 1907 and *Tectarchus diversus* Salmon, 1954 are synonyms of *Tectarchus huttoni* (Brunner von Wattenwyl, 1907) (which has been transferred from the genus *Pachymorpha* Gray). *Pachymorpha bouvieri* Brunner von Wattenwyl, 1907 is a synonym of *Mimarchus annulatus* (Hutton, 1898); and *Clitarchus interruptelineatus* Brunner von Wattenwyl, 1907 is a synonym of *Clitarchus hookeri* (White, 1846).

Key words

New Zealand, Salmon, Brunner von Wattenwyl, Naturhistorisches Museum Wien, synonym, Phasmida.

Introduction

Whilst revisiting the Naturhistorisches Museum Wien (NHMW) in 1996, I took the opportunity of examining Brunner von Wattenwyl's New Zealand taxa unfortunately overlooked in Salmon's excellent book (1991). I had already seen type material in Paris (MNHN) and believed that the *Pachymorpha* species described by Brunner von Wattenwyl in 1907 had been incorrectly placed in that genus.

My research has made certain taxonomic changes necessary, as listed in the following section. Listings of species include only the most important references or a change of genus made by a later author. Museum codens are also given below:

BMNH	The Natural History Museum, London, England.
CMNZ	Canterbury Museum, Christchurch, New Zealand.
MNHN	Museum National d'Histoire Naturelle, Paris, France.
MONZ	Museum of New Zealand, Wellington, New Zealand.
NHMW	Naturhistorisches Museum Wien, Wien, Austria.
ZMUH	Zoologisches Institut und Zoologisches Museum, Universität Hamburg, Hamburg, Germany.

Tectarchus Salmon, 1954

Tectarchus Salmon, 1954: 161. Type species: *Tectarchus diversus* Salmon, 1954: 163, designated by Salmon, 1954: 162 [= *Tectarchus huttoni* (Brunner von Wattenwyl), 1907: 213; see below].

Tectarchus huttoni (Brunner von Wattenwyl) comb.n.

Pachymorpha huttoni Brunner von Wattenwyl, 1907: 213. Syntype series: ♂, 2 ♀♀, New Zealand (NHMW, No. 383); ♂, ♀, New Zealand: Nelson (MNHN).

Pachymorpha finitima Brunner von Wattenwyl, 1907: 215. Holotype ♀, New Zealand, [18]48-52, leg. Petit, "Mus. Paris" (NHMW, No. 380). **syn.n.** [No types of this species were found in MNHN].

Tectarchus diversus Salmon, 1954: 163, pl. 7: 1-2, pl. 8: 1,2,4,8, pl. 9: 1 & 5. Holotype & paratypes ♂♂ & ♀♀, New Zealand (several localities) (MONZ, including coll. Salmon; also in coll. G. Ramsey). **syn.n.**

Mimarchus Carl, 1913

Mimarchus Carl, 1913: 22. Type species: *Mimarchus tarsatus* Carl, 1913: 23, by monotypy.

Mimarchus annulatus (Hutton)

Pachymorpha annulata Hutton, 1898: 162. Holotype ♀, New Zealand: Dunedin (CMNZ).

Mimarchus annulatus Hutton; Salmon, 1991: 96.

Pachymorpha bouvieri Brunner von Wattenwyl, 1907: 214. Syntype series: 3♂♂, 3♀♀, New Zealand: Invercargill, leg. Burr; ♂, 2♀♀, New Zealand: Nelson, 1876, leg. Filhol, "Mus. Paris"; ♂, no locality (NHMW, No. 378); ♂♂ & ♀♀, New Zealand (MNHN). **syn.n.**

Three further females in NHMW, without identification labels, are not regarded as part of the type series.

***Clitarchus* Stål, 1875**

Clitarchus Stål, 1875: 34, 82. Type species *Clitarchus laeviusculus* Stål, 1875: 82, by designation of Kirby, 1904: 339 [= *Clitarchus hookeri* (White), 1846].

***Clitarchus hookeri* (White)**

Phasma hookeri White, 1846: 24, pl. 6: 6. Holotype ♀, New Zealand (BMNH).

Bacillus hookeri (White); Westwood, 1859: 14.

Clitarchus hookeri (White); Stål, 1875: 83.

Clitarchus laeviusculus Stål, 1875: 82. Syntype series: 4♀♀, New Zealand, leg. Boucard (NHMW, No. 443). (synonymised by Ragge, 1965: 39).

Bacillus coloreus Colenso, 1885: 151. ♀, New Zealand: Pourerere, near Blackhead, 1884, leg. W. Scott. (synonymised by Brunner von Wattenwyl, 1907: 237).

Bacillus minimus Colenso, 1885: 153. New Zealand: Norsewood. (synonymised by Salmon, 1991: 82).

Clitarchus reductus Hutton, 1899: 55. ♀, New Zealand: Canterbury (CMNZ). (synonymised by Salmon, 1991: 82).

Clitarchus interruptelineatus Brunner von Wattenwyl, 1907: 236, pl. 10: 4a-d. Syntype series: ♂, 2♀♀, New Zealand (NHMW, No. 445); ♂, New Zealand: Great Barrier Island (ZMUH). **syn.n.**

Summary

Apart from noting new synonyms, there is only one significant change to make to Salmon's book, i.e. references to *Tectarchus diversus* should read *Tectarchus huttoni* (for main section on this species, see pages 101-105 of Salmon, 1991).

Whilst a number of species described by Brunner von Wattenwyl (1907) and Redtenbacher (1906; 1908) have been synonymised, I consider that once detailed studies are made on the phasmid fauna from other geographical regions, numerous further unpublished synonyms will be identified. A detailed background on the Brunner von Wattenwyl collection in Vienna is included in Brock (in press).

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